

What is claimed is:

1. An oil checking device for compressor of air conditioning system, comprising:

an oil container connected to an high-pressure part of the air conditioning system to receive refrigerant and oil from the high-pressure part, the oil container being formed of a transparent material so that a user can observe the oil mixed with the refrigerant;

valve means for selectively opening a gas line and a liquid line respectively connected to upper-inner and lower-inner portions of the oil container to exhaust refrigerant gas and compressor oil from the oil container to a low-pressure part of the air conditioning system;

a ball floater disposed in the oil container, the ball floater being designed to rise on a compressor oil surface when a buoyancy reaches a predetermined level as a density of the compressor oil is increased according to the operation of the valve means; and

an oil amount/state display part formed on the oil container, the oil amount/state display part having a reference oil level that can be compared with the compressor oil level and a reference color that can be compared with a color of the compressor oil.

2. The oil checking device of claim 1 wherein the oil container comprises a heat exchanger for providing a thermal balance between the compressor oil that is decreased in a temperature by vaporization of the refrigerant and an outer air.

3. The oil checking device of one of claims 1 and 2 wherein the valve means comprises a three-way valve for selectively connecting the gas and liquid lines to the low-pressure part.

4. The oil checking device of claim 3 wherein a drier is disposed on the  
5 gas line and a strainer is installed to the low-pressure part.

5. The oil checking device of one of claims 1 and 2 wherein the valve means comprises a gas control valve installed on the gas line and a three-way valve disposed between the liquid line and the low-pressure part, the valve means being integrally formed on the oil container.

10 6. The oil checking device of one of claims 1 and 2 wherein the oil container further comprises a separating plate installed on a high-pressure connecting side.